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FEDERAL COMMUNICATIONS COMMISSION
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Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

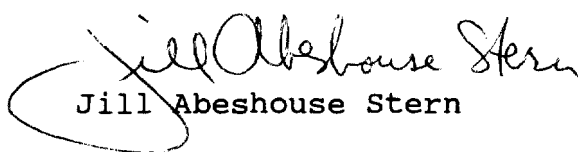
Re: PR Docket No. 92-235

Dear Mr. Caton:

On behalf of The Sport Flyers Association, I am transmitting herewith an original and four copies of its reply comments in the above-referenced spectrum refarming proceeding.

Should there be any questions concerning this matter, kindly communicate with the undersigned.

Sincerely,


Jill Abeshouse Stern

JAS:ble
Enclosures

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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In the Matter of

Replacement of Part 90 by Part 88 to
Revise the Private Land Mobile Radio
Services and Modify the Policies
Governing Them

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

PR Docket No. 92-235

REPLY COMMENTS OF THE SPORT FLYERS ASSOCIATION

Jill Abeshouse Stern, Esq.
Shaw, Pittman, Potts & Trowbridge
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Its Attorney

July 30, 1993

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SUMMARY

In its opening comments, The Sport Flyers Association (SFA), a national aeromodeling organization, strongly opposed the Commission's proposal to create 200 new low power mobile channels in the 72-76 MHz frequency bands currently used for radio remote control (R/C) of models. SFA proposed a simple solution: delete the 60 new channels directly adjacent to R/C channels which will have a significantly interfering effect, leaving 140 new channels for mobile use.

The comments filed by other parties in this proceeding unanimously agree with SFA that the proposed spacing reductions will be disastrous for the modeling industry. The comments provide concrete evidence, based on actual field tests, that devastating interference to R/C activities (with a potential impact on public safety) will result if the Notice's proposals are adopted. Apart from interference concerns, the comments detail the onerous costs, in terms of expense and dislocation, that will be incurred by R/C users and manufacturers if the proposed rule changes are adopted.

Despite the high costs of the proposed rule changes, there is no evidence in the comments that any one wants or needs the 200 new channels that would be created in the 72-76 MHz band. None of the opening comments supports the proposed spacing reductions in the 72-76 MHz band. Nor have any of the land mobile radio user or manufacturer groups endorsed the Commission's

proposal, or indicated any interest whatsoever in the proposed low power mobile channels in the 72-76 MHz band. Given the lack of interest, the proposed rule changes make no sense.

In light of the opening comments, the reasonableness of SFA's proposal --- to delete the 60 proposed channels that are directly adjacent to R/C operations --- is even more apparent. This proposal protects R/C operations while creating 140 new mobile channels in the 72-76 MHz band. It is highly unlikely that more than 140 new channels in each location will be needed for future low power mobile use, given the lack of demand and the limitations of the band.

The opening comments support a primary allocation for R/C use. SFA agrees with this proposal and its goal of providing greater certainty for the modeling community. SFA is willing to work with the Commission and other industry groups to identify suitable frequencies. SFA also continues to endorse the concept of a channel set-aside, either within the 72-76 MHz band or elsewhere, for innovative R/C technologies in order to stimulate technological development and more efficient spectrum use.

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REPLY COMMENTS OF THE SPORT FLYERS ASSOCIATION

The Sport Flyers Association ("SFA"), by its attorneys, submits the following reply comments in the Commission's "spectrum refarming" proceeding. This proceeding proposes significant regulatory changes in bands below 512 MHz currently allocated to private land mobile radio ("PLMR") services, which bands encompass the 72-76 MHz frequencies used for remotely-controlled models.

I.
SUMMARY OF SFA POSITION
AND OPENING COMMENTS

SFA is a national aeromodeling membership organization, which promotes and serves the modeling industry through a range of educational, technical, insurance and other activities. In its initial comments, filed May 28, 1993, SFA raised concerns about the Commission's proposal to create 200 new mobile channels in the 72-76 MHz bands, where remote control (R/C) model use is concentrated, by reducing spacing in those bands from 10 kHz bandwidth to 2.5 kHz.

As SFA pointed out in its previous comments, the proposed

interfering effect on the R/C industry.^{2/} The opening comments filed by the R/C community --- modelers and manufacturers --- establish that interference would inevitably result from the proposed spacing reductions. The comments also detail the industry costs, and public safety concerns, that would be raised if the Notice's proposals are adopted. Among the concerns expressed are the cost of replacing equipment,^{3/} the potential loss of control of model craft, and increased R/C congestion as the result of migration to the few R/C frequencies that are not bracketed by mobile channels.

II.
THE R/C INDUSTRY
UNANIMOUSLY OPPOSES THE PROPOSED SPACING
REDUCTIONS IN THE 72-76 MHZ BANDS

Admittedly, the Notice's proposals with respect to the 72-76 MHz bands are a minor aspect of the Commission's wide-ranging spectrum refarming proceeding. For the R/C community, however, these frequencies are critical to the continued existence and enjoyment of modeling. All of the comments which address the

^{2/} These 60 channels were identified in Exhibit 1 to SFA's May 28, 1993 Comments. For the Commission's convenience, a list of the channels to be deleted from proposed Rule 88.907(d) is attached hereto as Exhibit 1.

^{3/} SFA notes that, due to a typographical error, its opening

72-76 MHz bands agree that the proposed spacing reduction would be disastrous for the R/C industry and, potentially, for public safety.

The Academy of Model Aeronautics ("AMA"), for example, strongly opposes the spacing reduction in the 72-76 MHz bands.^{4/} The AMA comments provide the results of extensive testing conducted by AMA, which conclusively demonstrates that the proposed spacing reductions would result in "harmful electrical interference" to R/C operations.^{5/} The AMA tests demonstrate that the resulting interference could, in extreme cases, cause loss of model control, with ramifications for public safety.^{6/} Geographic separation is not helpful because, as AMA correctly points out, model aircraft fly above ground level and are therefore susceptible to an interfering transmitter located a great distance away.^{7/}

The interference potential noted by AMA and others will be heightened by the itinerant nature of the mobile communications. As SFA pointed out in its comments, if greater mobile use of the frequencies should develop, this use is likely to be itinerant

^{4/} See Comments of the Academy of Model Aeronautics, PR Docket 92-235 (Mar. 10, 1993) (hereinafter "AMA Comments"); Supplement to Comments of The Academy of Model Aeronautics (May 28, 1993) (hereinafter "AMA Supplemental Comments").

^{5/} See AMA Supplemental Comments at 5.

^{6/} See AMA Supplemental Comments at 7-10 and Exhibit 1.

^{7/} Id. at 9.

low power operation, such as a hand-held walkie-talkie. This is the very type of use that is most troublesome to the model aircraft industry, because coordination with itinerant, unsophisticated users will be extremely difficult, if not impossible.

The Radio Control Manufacturers Association ("RCMA"), representing 20 companies which manufacture or import radio control equipment, also opposed the proposed spacing reductions in the 72-76 MHz bands on the grounds that the R/C industry will suffer significant harm.^{8/} RCMA shares SFA's and AMA's interference concerns. In addition, RCMA details the potential economic costs that will result from the rule changes, including a redesign of R/C equipment and steep price increases. RCMA expects that a transition to narrow channel bandwidth will be difficult, because the size and weight of the R/C equipment will double or triple if the proposed rule changes are adopted.^{9/} Contributing to consumer resistance, RCMA doubts whether it will be possible to develop new radio devices that are comparable in capabilities and price to existing equipment.^{10/}

In short, the opening comments unanimously support SFA's contention that the proposed spacing reduction will have an adverse impact on modelers, R/C manufacturers and, ultimately,

^{8/} See Comments of the Radio Control Manufacturers Association. PR Docket 92-235 at 2 (May 28, 1993) (hereinafter "RCMA Comments").

^{9/} Id. at 6.

^{10/} Id. at 6-9.

the public. There is unanimous agreement that, with only 2.5 kHz channel separation between R/C frequencies and the new PLMR channels, destructive interference will inevitably result.^{11/} Moreover, the commenting parties agree that the Commission must also consider the economic impact on modelers who have made a substantial investment in their current equipment, and on R/C manufacturers who will be forced to develop new equipment that is likely to encounter consumer resistance.

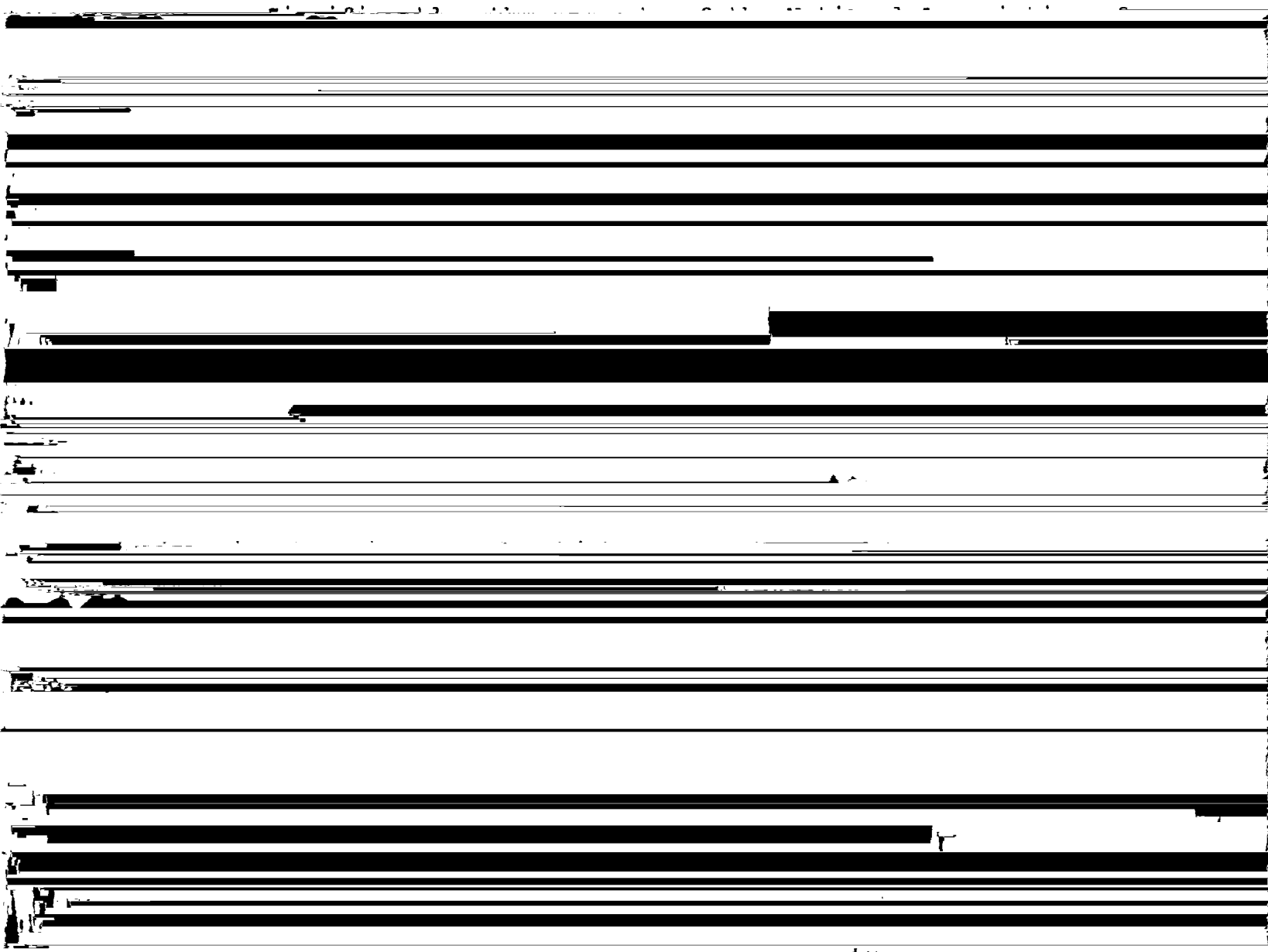
III.

NO NEED OR DEMAND HAS BEEN SHOWN FOR 200 NEW LOW-POWER MOBILE CHANNELS IN THE 72-76 MHz BANDS

The R/C community, including modelers and manufacturers, has vigorously opposed the proposed spacing reductions, and demonstrated its strong interest in ensuring the continued enjoyment of the allocated R/C frequencies. In addition to the comments of industry groups like SFA, AMA and RCMA, over 15,000 aeromodelers and aeromodeling organizations have written to the Commission or their elected representatives to protest the proposed spacing reductions. It is clear that the modeling community is sizeable and cares passionately about its sport.

^{11/} The comments also point out that the proposed 50 ppm frequency stability standard will increase the interference potential. See AMA Comments at 9 and RCMA Comments at 11. This relaxed standard will permit the new PLMR equipment to operate at up to 3.6 kHz variance from the assigned frequency.

In contrast to this overwhelming R/C interest, there has been no demand by mobile users for the additional low power mobile frequencies that the Commission proposes to create in the 72-76 MHz bands. No PLMR user group has expressed interest in the frequencies. Nor have the PLMR manufacturers indicated any desire to develop mobile equipment in the 72-76 MHz bands. As SFA pointed out in its previous comments, such commercial development is unlikely given the technical constraints of the wavelength, which will require a 4 to 8 foot antenna.^{12/}



American Mobile Radio Association, Inc. (AMRA), representing radio equipment dealers and diverse users of land mobile radio communications across the country, which specifically opposed the proposed channelization plan for the 72-76 MHz band, among other bands.^{14/}

Given the lack of support for the proposed 200 new mobile channels, and the severe impact on the R/C industry and public safety that will be caused, it makes no sense whatsoever to adopt the proposed rule changes. In light of the comments, SFA's proposal --- to delete only the 60 new channels that are directly adjacent to R/C operations --- is eminently reasonable. This proposal reconciles the Commission's goal of more efficient spectrum utilization with the needs of the R/C industry, and provides 140 new channels if, by chance, greater mobile use should develop in the future.^{15/} Absent current demand for additional channels, 140 channels in each location (not including over 500 additional channels proposed in other bands) should be more than enough for whatever low power mobile use may develop.

If the Commission is determined to reduce spacing in the R/C bands, the alternative approach advocated by RCMA in its comments

^{14/} Comments of the American Mobile Radio Association, Inc., filed May 28, 1993, in PR Docket No. 92-235 at 2.

^{15/} SFA notes that this approach represents a "compromise" position in that AMA appears to oppose any spacing reductions whatsoever in the 72-76 MHz bands regardless of proximity to R/C channels. According to SFA's analysis, only the 60 channels directly adjacent to R/C channels will have a significantly interfering effect.

may be worth considering. RCMA proposed a minimal spacing reduction in the 72 MHz band from 10 kHz to 7.5 kHz to be phased in by 2004.^{16/} RCMA represents the R/C manufacturers and therefore knows what technical changes are possible over the next ten years.

In SFA's view, the best approach is simply to delete the 60 proposed mobile channels that are adjacent to R/C operations and thereby avoid the associated costs to the R/C user community that even a minimal spacing reduction would entail. However, if the FCC is determined to reduce spacing, SFA endorses a more gradual transition, along the lines of the RCMA proposal to reduce spacing from 10 kHz to 7.5 kHz by 2004.

IV.
THE COMMENTS SUPPORT
ADDITIONAL PRIMARY SPECTRUM FOR R/C USE

The opening comments urge the Commission to dedicate spectrum to radio control use. RCMA, for example, suggests that a move of radio control users to a new frequency range could be accomplished with minimal disruption, in contrast to the spacing reductions proposed in the Notice.

SFA fully supports the concept of a permanent "home" for radio control users. The present secondary status of R/C users creates uncertainty that necessarily inhibits technological innovation and complicates coordination with other services. The

^{16/} See RCMA Comments at 2-3.

V.

NEW PART 88

SHOULD REFER TO R/C USERS

SFA agrees with the comments of other R/C industry groups that new Part 88 should contain an explicit reference to R/C operations, consistent with current Part 90. Under the Notice's proposal, all references to R/C use in the 72 and 75 MHz bands will be deleted from Part 88. SFA assumes that this omission ~~regulated from more appropriate and appropriate language will be~~

VI.
CONCLUSION

For reasons set forth herein and in its previous comments, SFA urges the Commission to maintain the status quo and delete 60 channels -- out of the 200 proposed new PLMR channels in the 72-76 MHz bands -- that are directly adjacent to R/C operations. Absent any showing of need or demand for these 60 additional channels, there is no justification for the severe interference to R/C activities that would be caused, and the potential disruption and expense that the modeler community will suffer, if the proposed rule changes are implemented.

Respectfully submitted,

THE SPORT FLYERS ASSOCIATION

By:



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EXHIBIT 1

Channels to be Deleted From Section 88.907(d) Proposal

72.0125	72.3125
72.0275	72.3275
72.0325	72.3325
72.0475	72.3475
72.0525	72.3525
72.0675	72.3675
72.0725	72.3725
72.0875	72.3875
72.0925	72.3925
72.1075	72.4075
72.1125	72.4325
72.1275	72.4475
72.1325	72.4725
72.1475	72.4875
72.1525	72.5125
72.1675	72.5275
72.1725	72.5525
72.1875	72.5675
72.1925	72.5925
72.2075	72.6075
72.2125	75.4325
72.2275	75.4475
72.2325	75.4725
72.2475	75.4875
72.2525	75.5125
72.2675	75.5275
72.2725	75.5525
72.2875	75.5675
72.2925	75.5925
72.3075	75.6075